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                 "Ask CAS" for self-help around the clock
NEWS
     2
NEWS
                 CA/CAplus records now contain indexing from 1907 to the
         SEP 09
                 present
                 Data from 1960-1976 added to RDISCLOSURE
NEWS
         Jul 15
NEWS
         Jul 21
                 Identification of STN records implemented
NEWS
         Jul 21
                 Polymer class term count added to REGISTRY
         Jul 22
                 INPADOC: Basic index (/BI) enhanced; Simultaneous Left and
NEWS
                 Right Truncation available
NEWS
     - 8
         AUG 05
                 New pricing for EUROPATFULL and PCTFULL effective
                 August 1, 2003
         AUG 13
                 Field Availability (/FA) field enhanced in BEILSTEIN
NEWS 9
                 PATDPAFULL: one FREE connect hour, per account, in
         AUG 15
NEWS 10
                 September 2003
        AUG 15
                 PCTGEN: one FREE connect hour, per account, in
NEWS 11
                 September 2003
NEWS 12
         AUG 15
                 RDISCLOSURE: one FREE connect hour, per account, in
                 September 2003
        AUG 15
                 TEMA: one FREE connect hour, per account, in
NEWS 13
                 September 2003
NEWS 14
        AUG 18
                 Data available for download as a PDF in RDISCLOSURE
        AUG 18
NEWS 15
                 Simultaneous left and right truncation added to PASCAL
NEWS 16 AUG 18
                 FROSTI and KOSMET enhanced with Simultaneous Left and Righ
                 Truncation
         AUG 18
                 Simultaneous left and right truncation added to ANABSTR
NEWS 17
NEWS 18
        SEP 22 DIPPR file reloaded
NEWS EXPRESS
             April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT
              MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
              AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
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NEWS PHONE
              Direct Dial and Telecommunication Network Access to STN
NEWS WWW
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SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

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STRUCTURE FILE UPDATES: 22 SEP 2003 HIGHEST RN 591204-55-6 DICTIONARY FILE UPDATES: 22 SEP 2003 HIGHEST RN 591204-55-6

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> s spermidine/cn

L1 1 SPERMIDINE/CN

=> d l1

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN

RN 124-20-9 REGISTRY

CN 1,4-Butanediamine, N-(3-aminopropyl)- (8CI, 9CI) (CA INDEX NAME) OTHER CA INDEX NAMES:

CN Spermidine (6CI)

OTHER NAMES:

CN 1,5,10-Triazadecane

CN 4-Azaoctane-1,8-diamine

CN N-(3-Aminopropyl)-1,4-butanediamine

CN N-(3-Aminopropyl)-1,4-diaminobutane

CN N-(3-Aminopropyl)-4-aminobutylamine

CN N-(4-Aminobutyl)-1,3-diaminopropane

CN Spermidin

FS 3D CONCORD

MF C7 H19 N3

CI COM

LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS,
CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DETHERM*, DRUGU, EMBASE,
GMELIN*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS,
NAPRALERT, NIOSHTIC, PIRA, PROMT, RTECS*, SPECINFO, SYNTHLINE,
TOXCENTER, USPAT2, USPATFULL

(*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

8527 REFERENCES IN FILE CA (1907 TO DATE) 220 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA 8536 REFERENCES IN FILE CAPLUS (1907 TO DATE) 86 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file uspatfull COST IN U.S. DOLLARS

SINCE FILE TOTAL SESSION ENTRY 7.50 7.71

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FULL ESTIMATED COST

FILE 'USPATFULL' ENTERED AT 12:15:59 ON 23 SEP 2003 CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 23 Sep 2003 (20030923/PD) FILE LAST UPDATED: 23 Sep 2003 (20030923/ED) HIGHEST GRANTED PATENT NUMBER: US6625813 HIGHEST APPLICATION PUBLICATION NUMBER: US2003177560 CA INDEXING IS CURRENT THROUGH 23 Sep 2003 (20030923/UPCA) ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 23 Sep 2003 (20030923/PD) REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2003 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2003

- >>> USPAT2 is now available. USPATFULL contains full text of the <<< >>> original, i.e., the earliest published granted patents or <<< >>> applications. USPAT2 contains full text of the latest US <<< >>> publications, starting in 2001, for the inventions covered in <<< >>> USPATFULL. A USPATFULL record contains not only the original <<< >>> published document but also a list of any subsequent <<< >>> publications. The publication number, patent kind code, and <<< >>> publication date for all the US publications for an invention <<< are displayed in the PI (Patent Information) field of USPATFULL >>> are displayed in the PI (Patent Information) field of USPATFULL <<< >>> records and may be searched in standard search fields, e.g., /PN, <<<>>> /PK, etc. <<< >>> USPATFULL and USPAT2 can be accessed and searched together <<< >>> through the new cluster USPATALL. Type FILE USPATALL to
- >>> enter this cluster. <<< <<< >>> >>> Use USPATALL when searching terms such as patent assignees, <<< >>> classifications, or claims, that may potentially change from <<< >>> the earliest to the latest publication. <<<

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 124-20-9/rn

218 124-20-9/RN

=> s 12 and pd<1994 1774017 PD<1994

(PD<19940000)

56 L2 AND PD<1994 L3

=> s 13 and composition 685627 COMPOSITION

L434 L3 AND COMPOSITION

=> d 14 1-34

```
ANSWER 1 OF 34 USPATFULL on STN
L4
       97:10017 USPATFULL
AN
       Amides of antibiotic GE 2270 factors
ΤI
       Tavecchia, Paolo, Rho, Italy
IN
       Lociuro, Sergio, Milan, Italy
       Ciabatti, Romeo, Novate Milanese, Italy
       Selva, Enrico, Gropello Cairoli, Italy
       Gruppo Lepetit SPA, Varese, Italy (non-U.S. corporation)
PA
                                19970204
PΙ
       US 5599791
       WO 9212172 19920723
                                19930701 (8)
       US 1993-84189
ΑI
                                19920102
       WO 1992-EP2
                                          PCT 371 date
                                19930701
                                19930701 PCT 102(e) date
                            19910103
       EP 1991-100123
PRAI
       Utility
\mathtt{DT}
FS
       Granted
LN.CNT 2389
       INCLM: 514/009.000
INCL
       INCLS: 540/451.000
              514/009.000
NCL
       NCLM:
       NCLS:
              540/451.000
       [6]
IC
       ICM: C07K007-56
       ICS: A61K035-66
       540/451; 514/9
EXF
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 2 OF 34 USPATFULL on STN
T.4
       93:109187 USPATFULL
ΑN
       Cyclic hydrocarbons with an aminoalkyl sidechain
TΙ
       Bundy, Gordon L., Kalamazoo, MI, United States
ΙN
       Wallach, deceased, Donald P., late of Richland, MI, United States by
       Vera M. Wallach, legal representative
       The Upjohn Company, Kalamazoo, MI, United States (U.S. corporation)
PA
                                19931228
       US 5274089
PI
                                19921106 (7)
ΑI
       US 1992-972693
       Division of Ser. No. US 1991-793486, filed on 13 Nov 1991, now patented,
RLI
       Pat. No. US 5187299 which is a continuation of Ser. No. US 1991-657729,
       filed on 20 Feb 1991, now abandoned which is a division of Ser. No. US
       1989-394396, filed on 15 Aug 1989, now abandoned which is a division of
       Ser. No. US 1987-117851, filed on 16 Jun 1987, now patented, Pat. No. US
       4917826 which is a continuation of Ser. No. US 1986-102116, filed on 7
       Oct 1986, now abandoned which is a continuation-in-part of Ser. No. US
       1986-843120, filed on 24 Mar 1986, now abandoned which is a
       continuation-in-part of Ser. No. US 1985-788995, filed on 18 Oct 1985,
       now abandoned
DT
       Utility

    Granted

FS
LN.CNT 4555
       INCLM: 540/112.000
INCL
       INCLS: 552/522.000
NCL
       NCLM:
              540/112.000
       NCLS:
              552/522.000
       [5]
IC
       ICM: C07J043-00
       ICS: C07J041-00
       540/112; 552/522
EXF
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
```

L4

ANSWER 3 OF 34 USPATFULL on STN

```
93:102706 USPATFULL
AN
       Strain of Corynebacterium glutamicum and method for producing L-lysine
TI
       Oh, Jong W., Seoul, Korea, Republic of
IN
       Kim, Seong J., Kyunggi-do, Korea, Republic of
       Cho, Young J., Kyunggi-do, Korea, Republic of
       Park, Nai H., Seoul, Korea, Republic of
       Lee, Jae H., Seoul, Korea, Republic of
       Cheil Sugar Co., Ltd., Seoul, Korea, Republic of (non-U.S. corporation)
PA
       US 5268293
                                19931207
PΙ
                                19920316 (7)
ΑI
       US 1992-851120
       Continuation of Ser. No. US 1990-500304, filed on 28 Mar 1990, now
RLI
       abandoned
PRAI
       KR 1989-4136
                           19890330
       Utility
DT
FS
       Granted
LN.CNT 331
INCL
       INCLM: 435/252.100
       INCLS: 435/115.000; 435/843.000
       NCLM: 435/252.100
NCL
       NCLS: 435/115.000; 435/843.000
IC
       [5]
       ICM: C12N001-20
       ICS: C12P013-08
EXF
       435/252.1; 435/843; 435/115
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 4 OF 34 USPATFULL on STN
L4
       93:93696 USPATFULL
AN
       Method of purifying putrescine N-methyltransferase from tobacco plant
TТ
       extract with a polyamine
IN
       Nakatani, Herbert Y., Midlothian, VA, United States
       Malik, Vedpal S., Richmond, VA, United States
       Philip Morris Incorporated, New York, NY, United States (U.S.
PA
       corporation)
                                                                      <--
                                19931109
       US 5260205
PI
       US 1990-613160
                                19901114 (7)
ΑI
DΤ
       Utility
FS
       Granted
LN.CNT 1253
INCL
       INCLM: 435/193.000
       INCLS: 435/815.000
NCL
       NCLM: 435/193.000
       NCLS: 435/815.000
       [5]
IC
       ICM: C12N009-10
       435/193; 435/815
EXF
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 5 OF 34 USPATFULL on STN
L4
       93:82867 USPATFULL
AN
       Complexes of nitric oxide with polyamines
ΤI
       Keefer, Larry K., Bethesda, MD, United States
IN
       Hrabie, Joseph A., Frederick, MD, United States
       The Government of the United States of America as represented by the
PA
       Secretary of the Department of Health and Human Services, Washington,
       DC, United States (U.S. government)
                                19931005
PΙ
       US 5250550
                                19920630 (7)
       US 1992-906479
ΑI
       Continuation of Ser. No. US 1990-585793, filed on 20 Sep 1990, now
RLI
       patented, Pat. No. US 5155137
DT
       Utility
FS
       Granted
```

```
LN.CNT 603
INCL
       INCLM: 514/357.000
       INCLS: 544/382.000; 546/205.000; 546/206.000; 546/223.000; 546/244.000;
              546/264.000; 546/329.000; 546/332.000; 514/319.000; 514/329.000;
              514/332.000; 514/611.000
              514/357.000
NCL
       NCLM:
              514/319.000; 514/329.000; 514/332.000; 514/611.000; 544/382.000;
       NCLS:
              546/205.000; 546/206.000; 546/223.000; 546/244.000; 546/264.000;
              546/329.000; 546/332.000
IC
       [5]
       ICM: A01N043-40
       546/244; 546/246; 546/247; 546/264; 546/332; 546/205; 546/206; 546/223;
EXF
       546/329; 514/255; 514/315; 514/351; 514/332; 514/319; 514/329; 514/357
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 6 OF 34 USPATFULL on STN
T.4
       93:71991 USPATFULL
ΑN
       Aerosol beam microinjector
TI
       Mets, Laurens J., Chicago, IL, United States
IN
       Biotechnology Research and Development Corporation, Peoria, IL, United
PA
       States (U.S. corporation)
       US 5240842
                                19930831
                                                                      <--
PΤ
                               19920619 (7)
ΑI
       US 1992-902478
       Continuation of Ser. No. US 1989-378256, filed on 11 Jul 1989, now
RLI
       abandoned
DT
       Utility
       Granted
FS
LN.CNT 823
       INCLM: 435/172.300
       INCLS: 435/172.100; 935/052.000; 935/053.000; 935/085.000
NCL
       NCLM:
              435/470.000
       NCLS: 800/293.000
IC
       [5]
       ICM: C12N015-87
       ICS: C12N015-89; C12N015-90
       435/172.1; 435/172.3; 935/52; 935/53; 935/85
EXF
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 7 OF 34 USPATFULL on STN
L4
AN
       93:31513 USPATFULL
       Purification of factor XIII
ΤI
       Bishop, Paul D., Fall City, WA, United States
IN
       Lasser, Gerald W., Lynnwood, WA, United States
       ZymoGenetics, Inc., Seattle, WA, United States (U.S. corporation)
PA
       US 5204447
                               19930420
·PI
                               19881114 (7)
ΑI
       US 1988-270714
DT
       Utility
FS
       Granted
LN.CNT 536
INCL
       INCLM: 530/381.000
       INCLS: 530/380.000; 530/416.000; 530/417.000; 530/418.000; 530/419.000;
              530/420.000; 530/421.000
       NCLM:
              530/381.000
NCL
              530/380.000; 530/416.000; 530/417.000; 530/418.000; 530/419.000;
              530/420.000; 530/421.000
IC
       [5]
       ICM: C07K003-22
       ICS: C07K003-24; C07K003-28; C07K015-00
       424/105; 530/380; 530/381; 530/412; 530/416; 530/417; 530/418; 530/419;
EXF
       530/420; 530/421; 435/69.6
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
```

```
ANSWER 8 OF 34 USPATFULL on STN
L4
AN
       93:22826 USPATFULL
       Cyclic hydrocarbons with an aminoalkyl sidechain
ΤI
IN
       Johnson, Roy A., Kalamazoo, MI, United States
       Bundy, Gordon L., Portage, MI, United States
       Youngdale, Gilbert A., Portage, MI, United States
       Morton, Douglas R., Portage, MI, United States
       Wallach, deceased, Donald P., late of Richland, MI, United States by
       Vera M. Wallach, legal representative
       The Upjohn Company, Kalamazoo, MI, United States (U.S. corporation)
PA
PI
       US 5196542
                               19930323
ΑI
       US 1991-657721
                               19910220 (7)
RLI
       Division of Ser. No. US 1989-394396, filed on 15 Aug 1989 which is a
       division of Ser. No. US 1987-117851, filed on 16 Jun 1987, now patented,
       Pat. No. US 4917826 which is a continuation-in-part of Ser. No. US
       1986-843120, filed on 24 Mar 1986, now abandoned which is a
       continuation-in-part of Ser. No. US 1985-788995, filed on 18 Oct 1985,
       now abandoned
DT
       Utility
FS
       Granted
LN.CNT 4544
       INCLM: 546/326.000
INCL
       INCLS: 546/333.000; 564/460.000; 540/107.000; 514/357.000; 514/172.000
NCL
       NCLM:
              546/326.000
       NCLS: 540/107.000; 546/333.000; 564/460.000
IC
       [5]
       ICM: C07D213-38
       ICS: C07D313-50; A61K031-58; A61K031-44
EXF
       546/329; 546/333; 364/460
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 9 OF 34 USPATFULL on STN
L4
AN
       93:22472 USPATFULL
TΙ
      ·Collagen-based wound dressing and method for applying same
       Silver, Fred, Bangor, PA, United States
IN
       Sharma, Vinay, Long Valley, NJ, United States
       Berndt, Dieter R., Allenwood, NJ, United States
       Marn, Louis E., Morris Plains, NJ, United States
       Micro-Collagen Pharmaceutics, Ltd., Long Valley, NJ, United States (U.S.
PA
       corporation)
       US 5196185
                               19930323
                                                                     <--
PΤ
ΑI
       US 1989-405520
                               19890911 (7)
       Utility
DT
FS
       Granted
LN.CNT 332
       INCLM: 424/045.000
INCL
       INCLS: 514/801.000; 424/428.000
NCL
       NCLM:
              424/045.000
       NCLS: 424/428.000; 514/801.000
IC
       [5]
       ICM: A61L009-04
       241/184; 424/45; 424/499; 128/156; 604/368; 514/778; 514/734; 530/356
EXF
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 10 OF 34 USPATFULL on STN
L4
AN
       93:12656 USPATFULL
TI
       Cyclic hydrocarbons with an aminoalkyl sidechain
       Johnson, Roy A., Kalamazoo, MI, United States
IN
       Bundy, Gordon L., Portage, MI, United States
       Youngdale, Gilbert A., Portage, MI, United States
       Morton, Douglas R., Portage, MI, United States
       Wallach, deceased, Donald P., late of Portage, MI, United States
```

```
Wallach, Legal Representative, by Vera M., Richland, MI, United States
       The Upjohn Company, Kalamazoo, MI, United States (U.S. corporation)
PA
       US 5187299
                               19930216
PΙ
       US 1991-793486
                               19911113 (7)
ΑI
       Continuation of Ser. No. US 1991-657729, filed on 20 Feb 1991, now
RLI
       abandoned which is a division of Ser. No. US 1989-394396, filed on 15
       Aug 1989, now abandoned which is a division of Ser. No. US 1987-117851,
       filed on 16 Jun 1987, now patented, Pat. No. US 4917826 which is a
       continuation-in-part of Ser. No. US 1986-843120, filed on 24 Mar 1986,
       now abandoned which is a continuation-in-part of Ser. No. US
       1985-788995, filed on 18 Oct 1985, now abandoned
рΨ
       Utility
       Granted
FS
LN.CNT 4473
INCL
       INCLM: 552/522.000
       INCLS: 552/554.000
              552/522.000
NCL
       NCLM:
       NCLS:
              552/554.000
IC
       [5]
       ICM: C07J041-00
       552/522; 552/554
EXF
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 11 OF 34 USPATFULL on STN
L4
ΑN
       92:96931 USPATFULL
       Preparation of amine-enriched proteins having an increased isoelectric
ΤI
       point
       Danielson, Susan J., Rochester, NY, United States
IN
       Specht, Donald P., Rochester, NY, United States
       Eastman Kodak Company, Rochester, NY, United States (U.S. corporation)
PΑ
                                                                      <--
PΙ
       US 5162219
                               19921110
                               19900618 (7)
ΑI
       US 1990-540428
DT
       Utility
       Granted
FS
LN.CNT 438
       INCLM: 435/192.000
INCL
       INCLS: 435/128.000
       NCLM:
              435/192.000
NCL
              435/128.000
       NCLS:
IC'
       [5]
       ICM: C12N009-08
       ICS: C12P013-00
       435/192; 435/128; 435/132
EXF
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 12 OF 34 USPATFULL on STN
L4
ΑN
       92:84894 USPATFULL
       Complexes of nitric oxide with polyamines
TI
       Keefer, Larry K., Bethesda, MD, United States
IN
       Hrabie, Joseph A., Frederick, MD, United States
       The United States of America as represented by the Secretary of the
PA
       Department of Health and Human Services, Washington, DC, United States
       (U.S. government)
       US 5155137
                                19921013
                                                                      <--
PT
       US 1990-585793
                                19900920 (7)
ΑI
       Utility
DT
       Granted
FS
LN.CNT 623
       INCLM: 514/611.000
INCL
       INCLS: 514/255.000; 514/315.000; 514/357.000; 544/382.000; 546/244.000;
              546/332.000; 564/112.000; 564/113.000
NCL
              514/611.000
       NCLM:
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NCLS:
              514/255.010; 514/315.000; 514/357.000; 544/382.000; 546/244.000;
              546/332.000; 564/112.000; 564/113.000
IC
       [5]
       ICM: A61K031-13
EXF
       564/109; 564/107; 564/112; 564/113; 514/610; 514/611
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 13 OF 34 USPATFULL on STN
L4
ΑN
       92:74640 USPATFULL
TI
       Cyclic hydrocarbons with an aminoalkyl sidechain
       Johnson, Roy A., Kalamazoo, MI, United States
IN
       Bundy, Gordon L., Portage, MI, United States
       Youngdale, Gilbert A., Portage, MI, United States
       Morton, Douglas R., Portage, MI, United States
       Wallach, deceased, Donald P., late of Kalamazoo, MI, United States
       Wallach, legal representative, by Vera M., Richland, MI, United States
       The Upjohn Company, Kalamazoo, MI, United States (U.S. corporation)
PA
                               19920908
       US 5145874
PΙ
                               19910225 (7)
       US 1991-663037
ΑI
       Continuation of Ser. No. US 1989-394396, filed on 15 Aug 1989, now
RLI
       abandoned which is a division of Ser. No. US 1987-117851, filed on 16
       Jun 1987, now patented, Pat. No. US 4917826 which is a
       continuation-in-part of Ser. No. US 1986-843120, filed on 24 Mar 1986,
       now abandoned which is a continuation-in-part of Ser. No. US
       1985-788995, filed on 18 Oct 1985, now abandoned
DT
       Utility
       Granted
FS
LN.CNT 4780
       INCLM: 514/650.000
INCL
       INCLS: 514/529.000; 514/532.000; 514/533.000; 514/534.000; 514/538.000;
              514/545.000; 514/579.000; 514/613.000; 514/616.000; 514/617.000;
              514/618.000; 514/619.000; 514/620.000; 514/621.000; 514/622.000;
              514/623.000; 514/642.000; 564/281.000; 564/337.000; 564/453.000;
              564/454.000; 564/455.000; 564/456.000; 564/461.000; 560/009.000;
              560/016.000; 560/037.000; 560/038.000; 560/039.000; 560/041.000;
              560/042.000; 560/051.000; 560/053.000; 560/056.000; 560/057.000;
              560/060.000; 560/061.000; 560/062.000; 560/063.000
NCL
      NCLM:
              514/650.000
              514/529.000; 514/532.000; 514/533.000; 514/534.000; 514/538.000;
      NCLS:
              514/545.000; 514/579.000; 514/613.000; 514/616.000; 514/617.000;
              514/618.000; 514/619.000; 514/620.000; 514/621.000; 514/622.000;
              514/623.000; 514/642.000; 564/281.000; 564/337.000; 564/453.000;
              564/454.000; 564/455.000; 564/456.000; 564/461.000
IC
       ICM: A61K031-16
       ICS: A61K031-165; A61K031-13; A61K031-135; C07C211-13; C07C211-21
       564/281; 564/461; 564/337; 564/453; 564/454; 564/455; 564/456; 514/579;
EXF
       514/642; 514/650; 514/529; 514/532; 514/533; 514/534; 514/538; 514/545;
       514/613; 514/616; 514/617; 514/618; 514/619; 514/620; 514/621; 514/622;
       514/623; 560/9; 560/16; 560/37; 560/38; 560/39; 560/41; 560/42; 560/51;
       560/53; 560/56; 560/57; 560/60; 560/61; 560/62; 560/63
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 14 OF 34 USPATFULL on STN
L4
AN
       92:29682 USPATFULL
       Iron complexes of hydroxypyridones useful for treating iron overload
ΤI
IN
       Hider, Robert C., Clacton, England
       Kontoghiorghes, George, London, England
       Silver, Jack, London, England
       Stockham, Michael A., Saffron Walden, England
      National Research Development Corporation, London, England (U.S.
PA
       corporation)
```

```
<--
PΙ
       US 5104865
                                19920414
       US 1989-403054
                                19890901 (7)
ΑI
       Continuation of Ser. No. US 1986-944355, filed on 22 Dec 1986, now
RLI
       abandoned which is a division of Ser. No. US 1984-651684, filed on 18
       Sep 1984, now patented, Pat. No. US 4666927
                           19830923
       GB 1983-25494
PRAI
DT
       Utility
FS
       Granted
LN.CNT 2029
       INCLM: 514/188.000
INCL
       INCLS: 514/184.000
NCL
       NCLM: 514/188.000
       NCLS: 514/184.000
IC
       [5]
       ICM: A61K031-555
       514/184; 514/188; 514/346; 514/350; 424/245; 424/256; 546/291; 546/292;
EXF
       546/296; 546/300
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 15 OF 34 USPATFULL on STN
       92:11195 USPATFULL
AN
       Lipid-protein compositions and articles and methods for their
TI
       preparation
       Ribi, Hans O., Atherton, CA, United States
TN
       Biocircuits Corporation, Burlingame, CA, United States (U.S.
PA
       corporation)
                                                                      <--
                                19920211
       US 5087952
PΙ
       US 1989-321962
                                19890310 (7)
ΑI
       Division of Ser. No. US 1986-933034, filed on 20 Nov 1986, now patented,
RLI
       Pat. No. US 4859538, issued on 22 Aug 1989
DT
       Utility
       Granted
FS
LN.CNT 926
       INCLM: 357/025.000
INCL
       INCLS: 357/023.150
       NCLM: 257/253.000
NCL
       NCLS: 257/414.000
       [5]
IC
       ICM: H01L029-66
       ICS: H01L029-96
       357/23.15; 357/25; 357/8; 435/176; 435/177; 435/180; 435/181
EXF
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 16 OF 34 USPATFULL on STN
L4
       92:9107 USPATFULL
ΑN
       Bis-naphthalimides as anticancer agents
ΤI
       Ardecky, Robert J., Landenberg, PA, United States
IN
       Patten, Arthur D., Bear, DE, United States
       Sun, Jung-Hui, Hockessin, DE, United States
       Du Pont Merck Pharmaceutical Company, Wilmington, DE, United States
PA
       (U.S. corporation)
                                19920204
                                                                      <--
PΙ
       US 5086059
       US 1990-539115
                                19900607 (7)
ΑI
       Utility
DT
FS
       Granted
LN.CNT 660
       INCLM: 514/284.000
INCL
       INCLS: 546/076.000; 546/077.000; 546/099.000
       NCLM: 514/284.000
NCL
              546/076.000; 546/077.000; 546/078.000; 546/099.000
       NCLS:
IC
       [5]
       ICM: C07D221-18
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ICS: A61K031-435
EXF
       546/77; 546/99; 546/76; 514/284
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
    ANSWER 17 OF 34 USPATFULL on STN
L4 ·
       92:5500 USPATFULL
AN
       Method for quantitative determination of polyamines
ΤI
       Okada, Masato, Yokohama, Japan
IN
       Sakamoto, Makoto, Fujisawa, Japan
      Tokuyama Soda Co., Ltd., Tokuyama, Japan (non-U.S. corporation)
PΑ
PΙ
       US 5082770
                               19920121
       US 1988-176885
                               19880404 (7)
ΑI
PRAI
       JP 1987-82206
                           19870404 -
       JP 1987-95218
                           19870420
DT
      Utility
FS
       Granted
LN.CNT 937
INCL
       INCLM: 435/026.000
       INCLS: 435/025.000; 435/018.000; 435/019.000; 435/189.000; 435/190.000;
              435/183.000; 435/859.000
NCL
       NCLM:
              435/026.000
              435/018.000; 435/019.000; 435/025.000; 435/183.000; 435/189.000;
       NCLS:
              435/190.000; 435/859.000
IC
       [5]
       ICM: C12Q001-32
       ICS: C12Q001-26; C12N009-04
       435/25; 435/26; 435/18; 435/19; 435/189; 435/190; 435/183; 435/803;
EXF
       435/814; 435/815; 435/859
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L4
     ANSWER 18 OF 34 USPATFULL on STN
       91:50610 USPATFULL
ΑN
       Photochemical nucleic acid-labeling reagent having a polyalklamine
ΤI
       Dattagupta, Nanibhushan, New Haven, CT, United States
IN
       Albarella, James P., Elkhart, IN, United States
       Molecular Diagnostics, Inc., West Haven, CT, United States (U.S.
PA
       corporation)
                                                                      <--
PΙ
       US 5026840
                               19910625
AΙ
       US 1990-475639
                               19900206 (7)
       Continuation of Ser. No. US 1987-27384, filed on 18 Mar 1987, now
RIJ
       patented, Pat. No. US 4950744 which is a continuation-in-part of Ser.
       No. US 1985-690336, filed on 10 Jan 1985, now abandoned
DT
       Utility
       Granted
FS
LN.CNT 930
       INCLM: 536/027.000
INCL
       INCLS: 435/004.000; 435/006.000; 435/188.000; 436/063.000; 436/094.000;
              436/501.000
NCL
       NCLM:
              536/025.320
              435/004.000; 435/006.000; 435/188.000; 436/063.000; 436/094.000;
       NCLS:
              436/501.000
IC
       [5]
       ICM: C07H015-12
       ICS: C12Q001-00
       536/27; 435/4; 435/6; 435/188; 436/63; 436/94; 436/501
EXF
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 19 OF 34 USPATFULL on STN
T.4
       91:44659 USPATFULL
AN
       Culture medium containing human albumin, process for the preparation of
ΤI
       an injectable product from this medium, product obtained and its use,
```

```
and composition obtained
       Drouet, Xavier, Paris, France
IN
       Goossens, Dominique, Paris, France
       Rouger, Philippe, Chaville, France
       Foundation Centre National de Transfusion Sanguine, Paris, France
PA
       (non-U.S. government)
                               19910604
ΡI
       US 5021349
                               19870611 (7)
       US 1987-61706
ΑI
       FR 1986-8494
                           19860612
PRAI
DT
       Utility
FS
       Granted
LN.CNT 341
       INCLM: 435/240.310
INCL
       INCLS: 435/240.200; 435/240.300
NCL
       NCLM: 435/407.000
IC
       ICM: C12N005-00
       435/68; 435/1; 435/172.2; 435/240.27; 435/240.31; 435/240.2; 435/240.3;
EXF
       530/387; 436/547; 436/548; 424/85; 935/107
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 20 OF 34 USPATFULL on STN
T.4
       90:50517 USPATFULL
AN
       Polycationic buffers and method for gel electrophoresis of nucleic acids
ΤI
       Mandecki, Wlodek, Vernon Hills, IL, United States
IN
       Hayden, Mark A., Vernon Hills, IL, United States
       Abbott Laboratories, North Chicago, IL, United States (U.S. corporation)
PA
       US 4936963
                               19900626
PΤ
       US 1989-356590
                               19890523 (7)
ΑI
       Continuation of Ser. No. US 1987-54645, filed on 27 May 1987, now
RLI
       abandoned
DТ
       Utility
       Granted
FS
LN.CNT 397
       INCLM: 204/182.800
       INCLS: 204/299.000R
       NCLM: 204/468.000
NCL
IC
       ICM: G01N027-26
EXF
       204/182.8; 204/299R; 204/180.1
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 21 OF 34 USPATFULL on STN
T.4
       90:34059 USPATFULL
ΑN
       Nucleic acid capture method
ΤI
       Gebeyehu, Gulilat, Silver Spring, MD, United States
TN
       Klevan, Leonard, Derwood, MD, United States
       Harding, John D., Potomac, MD, United States
       Life Technologies, Inc., Gaithersburg, MD, United States (U.S.
PΑ
       corporation)
                                                                      <--
       US 4921805
                               19900501
PΙ
                               19890929 (7)
       US 1989-414728
AΙ
       Continuation of Ser. No. US 1987-78991, filed on 29 Jul 1987, now
RLI
       abandoned
       Utility
DT
       Granted
FS
LN.CNT 655
       INCLM: 435/270.000
INCL
       INCLS: 435/006.000; 436/178.000; 436/501.000; 436/526.000; 935/019.000;
              935/085.000
NCL
       NCLM:
              435/270.000
       NCLS: 435/006.000; 436/178.000; 436/501.000; 436/526.000
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IC
       [5]
       ICM: C12N001-08
       436/94; 436/178; 436/501; 436/526; 435/6; 435/270; 435/803; 935/19;
EXF
       935/85; 210/635; 210/656
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 22 OF 34 USPATFULL on STN
L4
ΑN
       90:29778 USPATFULL
       Cyclic hydrocarbons with an aminoalkyl sidechain
ΤI
IN
       Johnson, Roy A., Kalamazoo, MI, United States
       Bundy, Gordon L., Portage, MI, United States
       Youngdale, Gilbert A., Portage, MI, United States
       Morton, Douglas R., Portage, MI, United States
       Wallach, deceased, Donald P., late of Kalamazoo, MI, United States by
       Vera M. Wallach, legal representative
       The Upjohn Company, Kalamazoo, MI, United States (U.S. corporation)
PΑ
                               19900417
                                                                     <--
       US 4917826
PΙ
                                                                     <--
       WO 8702367 19870423
                               19870616 (7)
ΑI
       US 1987-117851
      WO 1986-US2116
                               19861007
                               19870616 PCT 371 date
                               19870616 PCT 102(e) date
DT
       Utility
       Granted
FS
LN.CNT 4514
       INCLM: 552/522.000
INCL
       INCLS: 514/169.000; 514/182.000; 514/237.800; 514/255.000; 514/351.000;
              514/352.000; 514/381.000; 514/398.000; 514/399.000; 514/400.000;
              514/424.000; 514/426.000; 514/471.000; 514/472.000; 514/866.000;
              544/154.000; 544/380.000; 546/300.000; 546/304.000; 546/307.000;
              546/312.000; 548/263.000; 548/337.000; 548/341.000; 548/342.000;
              548/528.000; 549/480.000; 549/491.000; 549/492.000; 552/521.000
NCL
       NCLM:
              552/522.000
              514/169.000; 514/182.000; 514/237.800; 514/253.020; 514/351.000;
       NCLS:
              514/352.000; 514/381.000; 514/398.000; 514/399.000; 514/400.000;
              514/424.000; 514/426.000; 514/471.000; 514/472.000; 514/866.000;
              544/154.000; 544/380.000; 546/300.000; 546/304.000; 546/307.000;
              546/312.000
IC
       [4]
       ICM: C07J009-00
       ICS: C07D265-30; C07D295-00; C07D213-62; C07D213-78; A61K031-13;
       A61K031-395; A61K031-495
       514/169; 514/182; 260/397; 260/397.1; 260/397.5
EXF
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 23 OF 34 USPATFULL on STN
L4
AN
       90:23618 USPATFULL
TI
       Pharmaceutical compositions
       Hider, Robert C., Clacton, England
IN
       Kontoghiorghes, George, London, England
       Silver, Jack, London, England
       Stockham, Michael A., Saffron Walden, England
       National Research Development Corporation, London, England (non-U.S.
PA
       corporation)
                                                                     <--
PΙ
       US 4912118
                               19900327
                               19861222 (6)
ΑI
       US 1986-944872
       Division of Ser. No. US 1984-651684, filed on 18 Sep 1984, now patented,
RLI
       Pat. No. US 4666927
PRAI
       GB 1983-25494
                           19830923
DT
       Utility
FS
       Granted
LN.CNT 1927
```

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INCLM: 514/332.000
INCL
       INCLS: 514/334.000
       NCLM: 514/332.000
NCL
       NCLS: 514/334.000
IC
       [4]
       ICM: C07D401-12
       ICS: C07D401-14
       514/332; 514/334; 514/348; 514/350; 514/352; 424/10; 424/147
EXF
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 24 OF 34 USPATFULL on STN
T.4
ΑN
       89:69636 USPATFULL
       Novel lipid-protein compositions and articles and methods for their
ΤI
       preparation
       Ribi, Hans O., 33 Emily La., Atherton, CA, United States 94025
IN
                               19890822
PΙ
       US 4859538
                               19861120 (6)
ΑI
       US 1986-933034
DT
       Utility
FS
       Granted
LN.CNT 977
       INCLM: 428/474.400
INCL
       INCLS: 427/002.000; 435/004.000
       NCLM: 428/474.400
NCL
       NCLS: 340/815.400; 422/069.000; 427/002.130; 435/004.000; 438/001.000
IC
       [4]
       ICM: B32B027-00
       118/402; 427/2; 427/402; 428/408; 428/474.4; 435/4; 422/69
EXF
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 25 OF 34 USPATFULL on STN
L4
AN
       89:34520 USPATFULL
       S-alkylated coenzyme A with effect on polyamine acetylase
ΤI
       Pegg, Anthony E., Hummelstown, PA, United States
IN
       Erwin, Bradley G., Hershey, PA, United States
       Research Corporation, New York, NY, United States (U.S. corporation)
PA
                               19890502
                                                                      <--
PΙ
       US 4826968
                               19850426 (6)
       US 1985-727508
ΑI
       Utility
DΨ
       Granted
FS
LN.CNT 496
       INCLM: 536/027.000
INCL
       INCLS: 536/026.000; 536/028.000; 536/029.000; 530/331.000; 544/247.000
NCL
       NCLM: 536/026.230
       NCLS: 530/331.000; 544/247.000
IC
       [4]
       ICM: C07H019-167
       ICS: C07H019-207
EXF
       536/25; 536/22
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 26 OF 34 USPATFULL on STN
L4
       89:9378 USPATFULL
AN
       S-modified adenosyl-1,8-diamino-3-thiooctane derivatives
TI
       Anton, David L., Wilmington, DE, United States
TN
       Korant, Bruce D., Wilmington, DE, United States
       Wang, Chia-Lin J., Wilmington, DE, United States
       E. I. Du Pont de Nemours and Company, Wilmington, DE, United States
PA
       (U.S. corporation)
                                                                      <--
                                19890207
       US 4803272
ΡI
                               19870224 (7)
       US 1987-17889
ΑI
DT
       Utility
FS
       Granted
```

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LN.CNT 578
       INCLM: 544/277.000
       INCLS: 514/261.000; 514/266.000
       NCLM: 544/277.000
NCL
       NCLS: 514/263.400; 544/264.000
IC
       [4]
       ICM: A61K031-52
       ICS: C07D473-34
EXF
       544/262; 544/277; 514/261; 514/266
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L4
     ANSWER 27 OF 34 USPATFULL on STN
AN
       88:83860 USPATFULL
       Detection of nucleic acid hybrids by prolonged chemiluminescence
ΤI
       Dattagupta, Nanibhushan, New Haven, CT, United States
IN
       Clemens, Anton H., Elkhart, IN, United States
       Molecular Diagnostics, Inc., West Haven, CT, United States (U.S.
PA
       corporation)
       US 4794073
                               19881227
                                                                     <--
PΙ
       US 1985-753734
                               19850710 (6)
ΑI
DT
       Utility
FS
       Granted
LN.CNT 1496
       INCLM: 435/006.000
INCL
       INCLS: 435/028.000; 536/027.000; 252/700.000
NCL
              435/006.000
       NCLM:
              252/700.000; 435/028.000; 536/024.300; 536/025.320; 544/237.000
       NCLS:
IC
       [4]
       ICM: C12Q001-68
       ICS: C07H021-00
       435/6; 435/28; 536/27; 252/700
EXF
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 28 OF 34 USPATFULL on STN
L4
AN
       87:36107 USPATFULL
TI
       Pharmaceutical compositions of hydroxypyridones
       Hider, Robert C., Clacton, United Kingdom
IN
       Kontoghiorghes, George, London, United Kingdom
       Silver, Jack, London, United Kingdom
       Stockham, Michael A., Walden, United Kingdom
       National Research Development Corporation, London, England (non-U.S.
PA
       corporation)
                               19870519
                                                                     <--
PΙ
       US 4666927
       US 1984-651684
ΑI
                               19840918 (6)
PRAI
       GB 1983-25494
                           19830923
DT
       Utility
FS
       Granted
LN.CNT 1680
       INCLM: 514/350.000
INCL
       INCLS: 514/346.000; 546/291.000; 546/292.000; 546/296.000; 546/300.000
NCL
       NCLM: 514/350.000
       NCLS:
              514/346.000; 546/291.000; 546/292.000; 546/296.000; 546/300.000
IC
       [4]
       ICM: A61K031-495
       ICS: C07D239-02
       546/291; 546/292; 546/296; 546/300; 424/245; 424/256; 514/346; 514/350
EXF
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 29 OF 34 USPATFULL on STN
L4
AN
       86:31285 USPATFULL
TI
       Method and ingestible formulation for inhibiting the secretion of
       stomach acid
```

```
Ray, Tushar K., Dewitt, NY, United States
IN
       Research Foundation of State University of New York, Albany, NY, United
PA
       States (U.S. corporation)
                               19860527
                                                                      <--
PΙ
       US 4591605
       US 1982-437847
                               19821029 (6)
AΤ
       Continuation-in-part of Ser. No. US 1981-319929, filed on 10 Nov 1981,
RLI
       now abandoned
DT
       Utility
FS
       Granted
LN.CNT 400
INCL
       INCLM: 514/579.000
NCL
       NCLM: 514/579.000
IC
       [4]
       ICM: A61K031-13
EXF
       424/325; 514/579
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 30 OF 34 USPATFULL on STN
L4
AN
       85:17810 USPATFULL
       Epithelial cell growth regulating composition containing
TΙ
       polvamines and a method of using same
       Raisfeld, Ilene H., Setauket, NY, United States
IN
       The Research Foundation of State University of New York, Albany, NY,
PΑ
       United States (U.S. corporation)
                                                                      <--
                               19850326
PΙ
       US 4507321
       US 1982-349598
                               19820217 (6)
ΑI
       Utility
DT
FS
       Granted
LN.CNT 573
       INCLM: 514/673.000
INCL
       INCLS: 424/326.000; 514/674.000; 514/927.000
              514/673.000
NCL
       NCLM:
       NCLS: 514/674.000; 514/927.000
TC
       [3]
       ICM: A61K031-13
       ICS: A61K031-155
       424/325; 424/326
EXF
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 31 OF 34 USPATFULL on STN
T.4
       85:4845 USPATFULL
AN
       Direct-positive silver halide photographic material
ΤI
       Yoshida, Kazuhiro, Hino, Japan
ΤN
       Konishiroku Photo Industry Co., Ltd., Tokyo, Japan (non-U.S.
PΑ
       corporation)
       US 4495274
                               19850122
                                                                      <--
PΤ
       US 1983-487216
                               19830421 (6)
ΑI
       JP 1982-68785
                           19820426
PRAI
DT
       Utility
FS
       Granted
LN.CNT 607
       INCLM: 430/523.000
INCL
       INCLS: 430/597.000; 430/596.000; 430/605.000; 430/608.000; 430/606.000;
              430/599.000; 430/607.000; 430/614.000; 430/611.000; 430/940.000
NCL
       NCLM:
              430/523.000
              430/596.000; 430/597.000; 430/599.000; 430/605.000; 430/606.000;
       NCLS:
              430/607.000; 430/608.000; 430/611.000; 430/614.000; 430/940.000
IC
       [3]
       ICM: G03C001-36
       430/940; 430/596; 430/597; 430/605; 430/606; 430/608; 430/599; 430/611;
EXF
       430/614; 430/607; 430/523
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
```

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ANSWER 32 OF 34 USPATFULL on STN
L4
AN
       84:55345 USPATFULL
       Radiosensitizing nitrobenzoic acid amide derivatives
TΙ
       Fujita, Eiichi, Kyoto, Japan
IN
       Nagao, Yoshimitsu, Uji, Japan
       Mori, Tomoyuki, Yokohama, Japan
       Murayama, Chieko, Zama, Japan
       Asao, Tetsuji, Tokushima, Japan
       Taiho Pharmaceutical Company Limited, Tokyo, Japan (non-U.S.
PΑ
       corporation)
PI
       US 4474814
                                19841002
                                                                      <--
ΑT
       US 1982-444339
                                19821123 (6)
PRAI
       JP 1981-191228
                           19811126
       Utility
DT
FS
       Granted
LN.CNT 499
       INCLM: 424/324.000
INCL
       INCLS: 564/139.000; 564/157.000
       NCLM: 514/616.000
NCL
       NCLS: 564/139.000; 564/157.000
IC
       [3]
       ICM: C07C103-82
       ICS: C07C103-87; A61K031-165
       564/139; 564/157; 424/324
EXF
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 33 OF 34 USPATFULL on STN
L4
       76:47911 USPATFULL
AN
ΤI
       Fermentation of cephamycin C
       Inamine, Edward, Rahway, NJ, United States
TN
       Birnbaum, Jerome, Morganville, NJ, United States
       Merck & Co., Inc., Rahway, NJ, United States (U.S. corporation)
PA
                                19760831
PΙ
       US 3977942
       US 1975-634106
                                19751121 (5)
ΑI
       Utility
ידית
       Granted
FS
LN.CNT 672
INCL
       INCLM: 195/080.000R
       INCLS: 195/036.000C
NCL
       NCLM: 435/048.000
       NCLS: 435/032.000; 435/244.000; 435/886.000
IC
       [2]
       ICM: C12D009-00
       195/36C; 195/80R; 195/29
EXF
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 34 OF 34 USPATFULL on STN
L4
       72:45322 USPATFULL
AN
       ANTIMUTAGENIC TREATMENT OF BACTERIA
TΙ
       Sevag, Manasseh G., Newtown Square, PA, United States
IN
       The Trustees of the University of Pennsylvania, United States
PA
       US 3689646
                                19720905
PΙ
       US 1969-871019
                                19690904 (4)
ΑI
       Division of Ser. No. US 1969-576566, filed on 1 Sep 1969, now abandoned
RLI
       which is a continuation-in-part of Ser. No. US 1963-297200, filed on 24
       Jul 1963, now abandoned And a continuation-in-part of Ser. No. US
       1964-355480, filed on 27 Mar 1964, now abandoned
DT
       Utility
       Granted
FS
LN.CNT 668
       INCLM: 424/181.000
INCL
```

```
INCLS: 424/227.000; 424/228.000; 424/229.000; 424/257.000
NCL
      NCLM: 514/027.000
              514/029.000; 514/037.000; 514/152.000; 514/217.000; 514/226.200;
       NCLS:
              514/297.000; 514/370.000; 514/628.000; 514/654.000; 514/673.000
IC
       [1]
       ICM: A61K021-00
       ICS: A61K027-00
       424/257; 424/229; 424/228; 424/227; 424/181
EXF
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
=> d 14 1-4,30-34 kwic
     ANSWER 1 OF 34 USPATFULL on STN
L4
      US 5599791
                              19970204
PΙ
       WO 9212172 19920723
       . . . 28.degree.-30.degree. C. and then used to inoculate 500 ml
DETD
       flasks containing 100 ml of a seed media of the following
       composition:
       What is claimed is:
CLM
       13. A pharmaceutical composition containing a compound of
       claim 1 as the active ingredient in admixture with a pharmaceutically
       acceptable carrier.
                          1119-28-4, 3-Aminopropionitrile fumarate
IT 124-20-9, Spermidine
        (tert-butoxycarbonylation of)
     ANSWER 2 OF 34 USPATFULL on STN
L4
                               19931228
PΙ
       US 5274089
       The substrate is phosphatidyl choline. The material has a fatty acid
SUMM
       composition upon saponification, of 2% of 16:0, 1% of 18:0, 3%
      of 18:1, 18% of 18:2, and 12% of 18:3 fatty.
                                             53-16-7, Estrone, reactions
      50-28-2, reactions 51-67-2, Tyramine
IT
      53-41-8 53-43-0, 3.beta.-Hydroxy-5-androsten-17-one
                                                             53-45-2,
      Estra-1,3,5(10)-trien-17-one 64-04-0, Phenethylamine
                                                             64-18-6,
      reactions 71-44-3, Spermine
                                    75-07-0, reactions 79-04-9
                                                                     81-25-4
      89-97-4, 2-Chlorobenzylamine
                                     90-42-6, 2-Cyclohexyl cyclohexanone
      91-00-9, Aminodiphenylmethane
                                    92-68-2, 4-Cyclohexylcyclohexanone
      95-00-1, 2,4-Dichlorobenzylamine 96-32-2, Methyl bromoacetate
                          100-52-7, reactions 102-49-8,
      100-46-9, reactions
      3,4-Dichlorobenzylamine 104-53-0, Hydrocinnamaldehyde
                                                                104-86-9.
      4-Chlorobenzylamine 104-88-1, 4-Chlorobenzaldehyde, reactions
      105-39-5, Ethyl chloroacetate 107-13-1, reactions 107-85-7,
      Isoamylamine 108-00-9, unsym-Dimethyl-ethylenediamine
                                                                108-31-6,
      reactions 108-94-1, reactions 109-01-3, N-Methylpiperazine
      109-55-7, 3-Dimethylaminopropylamine 109-64-8, 1,3-Dibromopropane
      109-76-2, 1,3-Propanediamine 110-13-4, 2,5-Hexanedione 110-60 1,4-Diaminobutane 111-40-0 123-00-2, 3-Morpholinopropylamine
                                                                110-60-1,
      123-38-6, reactions 124-09-4, reactions 124-13-0, Octylaldehyde
      124-20-9, Spermidine 124-25-4, Tetradecyl aldehyde 138-14-7
      140-75-0, 4-Fluorobenzylamine 140-80-7, 2-Amino-5-diethylaminopentane
      156-87-6 327-92-4, 1,5-Difluoro-2,4-dinitrobenzene 333-93-7,
      1,4-Diaminobutane dihydrochloride 373-44-4, 1,8-Octanediamine
      462-94-2, 1,5-Diaminopentane 502-72-7, Cyclopentadecanone 506-59-2,
                                    566-88-1, 5.alpha.-Cholestan-3-one
      Dimethylamine hydrochloride
      590-86-3, Isovaleraldehyde 593-51-1, Methylamine hydrochloride
                                    617-89-0, 2-Aminomethyl-furan
      598-21-0, Bromoacetyl bromide
      1,10-Decanediamine 700-58-3, 2-Adamantanone 766-39-2,
      2,3-Dimethylmaleic anhydride 814-68-6, Acryloyl chloride
                                                                   830-13-7,
      Cyclododecanone 929-06-6, 2-(2-Aminoethoxy)ethanol 963-74-6,
      5.alpha.-Androstan-17-one 1035-77-4, Estradiol 3-methyl ether
      1624-62-0, Estrone methyl ether 1755-52-8 2038-03-1,
```

```
2-Morpholinoethylamine 2393-23-9, 4-Methoxybenzylamine
     Diphenyl chlorophosphate 2706-56-1, 2-(2-Aminoethyl)pyridine
     2740-83-2, 3-(Trifluoromethyl)benzylamine
                                                3029-19-4,
     1-Pyrenecarboxaldehyde 3048-01-9 3179-63-3 3300-51-4,
     4-(Trifluoromethyl)benzylamine 3731-51-9, 2-(Aminomethyl)pyridine
     3731-52-0, 3-(Aminomethyl)pyridine 3731-53-1, 4-(Aminomethyl)pyridine
     4048-33-3, 6-Amino-1-hexanol 4097-89-6, Tris-(2-aminoethyl)amine
     4894-75-1 5036-48-6 5104-49-4, Flurbiprofen 5538-95-4,
     N-Dodecyl-1,3-propanediamine 5625-80-9 5680-79-5, Glycine methyl
     ester hydrochloride 5993-91-9 6211-16-1 6384-10-7, Ornithine methyl
                                   7152-51-4 7209-38-3,
     ester 6711-48-4
                       7149-10-2
     1,4-Bis(3-aminopropyl)piperazine 7663-77-6, 1-(3-Aminopropyl)-2-
     pyrrolidinone 10025-87-3 10517-44-9 13258-63-4,
     4-(2-Aminoethyl)pyridine 14210-25-4 19475-35-5 21370-71-8,
                      27757-85-3, 2-Thiophenemethylamine
                                                            28143-91-1
     trans-1-Decalone
                  30525-89-4, Paraformaldehyde
                                               31239-17-5,
     29602-39-9
                                       34015-48-0, Lysine methyl ester
     5.alpha.-Androstan-17.beta.-amine
                       35303-76-5, 4-(2-Aminoethyl)benzenesulfonamide
     dihvdrochloride
                              49783-80-4
                                           55757-60-3
                                                      56183-69-8, Diethyl
     40226-15-1
                  42014-51-7
                                       75659-75-5 83732-75-6,
     phosphorohydrazidate
                          69225-59-8
     2-(2-Aminoethyl)-1-methylpyrrole 85666-15-5
                                                    112663-37-3
                                                                  112663-43-1
        (reaction of, in synthesis of phospholipase A2-inhibiting amino
       steroids and analogs)
    ANSWER 3 OF 34 USPATFULL on STN
                              19931207
      US 5268293
      . . (as mono-hydrochloride salt) accumulated in the culture broth
      is analyzed by the acidic ninhydrin method or HPLC, and amino acid
      composition in the culture broth is analyzed with an amino acid
      autoanalyzer.
      . . . cultivated in a 30-L Jar fermentor at 32.degree. C., pH
      6.8.about.7.0 under 0.5.about.1.0 vvm of aeration rate. The amino acid
      composition of culture broth was analyzed with an amino acid
      autoanalyzer as shown in Table I. To investigate the effects of. . .
                    TABLE I
+ Amino acid composition in the culture broth of
Corynebacterium glutamicum YJ-150
Amino Acid g/l
                     Amino Acid g/l
L-Lysine .multidot. HCl
           90.5
                      Glutamic acid
                                trace
Alanine
           1.2
                      Leucine. .
      . . fermentor with Corynebacterium glutamicum CS-755 and YJ-150 \,
       (parent strain of CS-755). The amount of L-lysine produced and the amino
      acid composition in the resultant culture broth are shown in
      Table VI and Table VII, respectively.
                    TABLE VII
Amino acid composition in the culture broth of
Corynebacterium glutamicum CS-755
           Amount
                                 Amount
           produced
                                 produced
Amino Acid (g/l)
                      Amino Acid (g/l)
L-Lysine .multidot. HCl
           120
                     Glutamic.
     71-44-3, Spermine 74-79-3D, Arginine, analogs 110-60-1, Putrescine
     124-20-9, Spermidine 461-89-2, 6-Azauracil 462-94-2,
```

Cadaverine 543-38-4, Canavanine 957-77-7, 5-Hydroxyuridine 1596-65-2 2280-42-4, .alpha.-Amino-.beta.-hydroxyvaleric acid

L4

PΙ

DETD

DETD

DETD

DETD

DETD

IT

2936-69-8, S-(.beta.-Aminoethyl)-L-cysteine 5699-67-2, Arginine hydroxamate 7431-89-2 7730-20-3, 6-Fluorotryptophan (Corynebacterium glutamicum mutant resistant to, lysine manuf. with)

ANSWER 4 OF 34 USPATFULL on STN L4<--PΙ US 5260205 19931109 . . step of applying a tobacco plant extract to an anion exchange DETD medium, wherein the application temperature and the pH and composition of the extract are such that PMT is retained by the anion exchange medium. The PMT is then eluted from. . . with an elution buffer comprising an effective amount of a polyamine, wherein the elution temperature and the pH and chemical composition of the elution buffer are such that but for the polyamine, the PMT would be retained by the anion exchange. . . . however, the tobacco plant extract applied to the column (e.g., DETD preferably, the phenylagarose eluate) must have a pH and chemical composition such that the PMT in the extract will bind to the anion exchange medium. That is, the extract should have. . . . hours. Preferably, the dialysis buffer will be stirred. A DETD dialysis membrane having a 10,000 kD cut-off is preferred. The chemical composition and pH of the dialysis buffer is chosen so that PMT in the dialyzed fraction will be retained by the. to be applied to the anion exchange medium, the anion exchange DETD medium equilibration buffer must have a pH and chemical composition such that PMT is retained by the medium. Similarly, the skilled worker easily may determine suitable pH/chemical composition combinations. The preferred equilibration buffer contains essentially no added salt and has a pH of between about 7.2 to 8.3,. . . . with an elution buffer comprising an effective amount of a DETD polyamine, wherein the elution temperature and the pH and chemical composition of the elution buffer are such that but for the polyamine, the PMT would be retained by the anion exchange. . . Composition of Buffer Solutions DETD What is claimed is: CLM(1) applying the extract to a solid phase anion exchange medium, wherein the application temperature and the pH and chemical composition of the extract are such that putrescine N-methyltransferase is retained by the anion exchange medium; (2) selectively eluting the putrescine. . . consisting of putrescine, N-methylputrescine, spermine, spermidine, agmatine, cadaverine, and mixtures thereof, wherein the elution temperature and the pH and chemical composition of the elution buffer are such that the putrescine N-methyltransferase would be retained by the anion exchange medium if the. 71-44-3, Spermine **124-20-9**, Spermidine 306-60-5, Agmatine ΙT 462-94-2, Cadaverine 14475-60-6, N-Methylputrescine (as eluant in purifn. tobacco root putrescine methyltransferase by anion-exchange chromatog.) ANSWER 30 OF 34 USPATFULL on STN L4Epithelial cell growth regulating composition containing ΤI polyamines and a method of using same 19850326 US 4507321 PΙ The present invention relates to composition containing SUMM polyamines which act as epithelial cell growth regulators, i.e. stimulants and inhibitors. Many of these compounds have been found.

present invention are known in the chemical art. Details of the synthetic preparation of many of.

The compounds useful in the composition and methods of the

Specific compounds utilizable in the composition and methods SUMM

SUMM

```
] immediately following each compound is. .
      The epithelial cell regulating activity of the compounds utilizable in
SUMM
      the composition method of the present invention may be
      determined by measurement of the effect of the test compound in a
      screening.
SUMM
       . . . (inhibitory amount). In the usual course of therapy, the active
      compound is incorporated into an acceptable vehicle to form a
      composition for topical administration to the affected area or
      into a form suitable for oral or parenteral administration, such as
SUMM
       . . . be based upon standard carriers such as pharmaceutically
      acceptable vegetable oils and gelatins, gums and petrolatum. Other
      ingredients to the composition of the present invention may be
      preservatives, coloring, flavoring, sweetening, thickening, suspending,
      disbursing, emulsifiing, swelling, stabilizing and buffering agent as.
      Where the composition of the present invention is used to
SUMM
      treat ischemic, decubitus, or peptic ulcers a combination of topical and
      systemic therapy.
DETD
      . . . accordance with the above procedure, but where in place of
      spermidine, there is utilized spermine, or agmatine sulfate, a similar
      composition is obtained.
      By utilizing spermine, putrescine or agmatine sulfate in place of
DETD
      spermidine, a similarly useful composition is obtained.
                                  306-60-5
ΙT
              110-60-1 124-20-9
        (pharmaceutical compn. contg., for epithelium growth regulation)
    ANSWER 31 OF 34 USPATFULL on STN
L4
                                                                \ <--
PΙ
      US 4495274
                              19850122
       . . . the present invention is changeable over a wide range. The
SUMM
      fogging degree is related not only to the silver halide
      composition, the particle size, etc., of the silver halide
      emulsion used but also to the kind and concentration of the fogging. .
ΙT
     71-44-3
              94-52-0 111-40-0
                                    112-24-3 112-57-2 124-20-9
     4067-16-7
                4403-32-1 4605-14-5
                                        5401-94-5
                                                    7597-18-4
                                                                33568-98-8
     62572-78-5
        (photog. low speed direct-pos. emulsion contg.)
    ANSWER 32 OF 34 USPATFULL on STN
L4
      US 4474814
                              19841002
                                                                   <--
PΙ
      Given below are examples of pharmacological composition
DETD
      according to the invention.
      What is claimed is:
CLM
      6. A radiosensitizer composition comprising a radiosensitizing
      amount of a compound of claim 1 and a pharmaceutically acceptable
      carrier therefor.
IT
     71-44-3 124-20-9
        (N-nitrobenzoylation of)
    ANSWER 33 OF 34 USPATFULL on STN
L4
                                                                   <--
ΡI
      US 3977942
                              19760831
DETD
      The basal production medium has the following composition:
      The basal production medium has the following composition:
DETD
      The basal production medium has the following composition:
DETD
      The basal production medium has the following composition:
DETD
      The basal production medium has the following composition:
DETD
     70-54-2 71-44-3 109-76-2 110-60-1 124-20-9 157-06-2
IT
     306-60-5
               348-66-3
                           462-94-2 616-07-9 616-29-5
     6291-84-5
                7200-25-1
```

of the present invention are the following: (a reference indicated in [

ANSWER 34 OF 34 USPATFULL on STN T.4 PΙ

19720905 US 3689646

Accordingly it is an object of this invention to provide a SUMM composition and method for controlling bacteria wherein the emergence of such drug-resistant strains is prevented. Other objects and advantages of this.

<--

CLM What is claimed is:

- 2. A composition for killing bacteria by physical contact therewith consisting essentially of (1) an effective amount of a bactericidal component selected from.
- 3. A composition for killing bacteria by physical contact, comprising a sterile aqueous solution of about 10- 100 micrograms per milliliter or streptomycin.
- 4. A composition for killing bacteria by physical contact, comprising a sterile aqueous solution of about 0.01- 1.0 unit of penicillin per milliliter. . .
- 5. A composition for killing bacteria by physical contact comprising a sterile aqueous solution of about 0.1- 10 micrograms per milliliter of novobiocin.
- 6. A composition for killing bacteria by physical contact comprising a sterile aqueous solution of about 0.1-10.0 micrograms per milliliter of erythromycin and. . . .
- 7. A composition for killing bacteria by physical contact comprising a sterile aqueous solution of about 0.1- 10.0 micrograms per milliliter of tetracycline. . .
- 8. A composition for killing bacteria by physical contact comprising a sterile aqueous solution of about 0.1- 10 micrograms per milliliter of chloramphenicol. . .
- 9. A composition for killing bacteria by physical contact comprising a sterile aqueous solution of about 0.1- 100 micrograms per milliliter of sulfathiazole.
- 50-53-3, biological studies 58-28-6 50-49-7 IT 50-48-6 60-99-1 69-05-6 71-44-3 83-89-6 **124-20-9** 303-53-7 3589-31-9 438-60-8

(antimutagenic agent, in bactericides)

Welcome to STN International! Enter x:x

LOGINID: sssptau125txc

PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * * * SESSION RESUMED IN FILE 'USPATFULL' AT 12:31:09 ON 23 SEP 2003 FILE 'USPATFULL' ENTERED AT 12:31:09 ON 23 SEP 2003 CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS) COST IN U.S. DOLLARS SINCE FILE

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
35.00
42.71

=> file registry
COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 35.00 42.71

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STRUCTURE FILE UPDATES: 22 SEP 2003 HIGHEST RN 591204-55-6 DICTIONARY FILE UPDATES: 22 SEP 2003 HIGHEST RN 591204-55-6

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> s putrescine/cn

L5 1 PUTRESCINE/CN

=> d 15

L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN

RN 110-60-1 REGISTRY

CN 1,4-Butanediamine (8CI, 9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Tetramethylenediamine (7CI)

OTHER NAMES:

CN .alpha.,.omega.-Butanediamine

CN 1,4-Butylenediamine

CN 1,4-Diamino-n-butane

CN 1,4-Diaminobutane

CN 1,4-Tetramethylenediamine

CN NSC 60545

CN Putrescin

CN Putrescine

```
3D CONCORD
FS
MF
     C4 H12 N2
CI
     COM
                 AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
LC
     STN Files:
       BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN,
       CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*,
       DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, GMELIN*, HODOC*, IFICDB,
       IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC,
       PIRA, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, USPAT7, USPATFULL
         (*File contains numerically searchable property data)
     Other Sources: EINECS**, NDSL**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)
H_2N-(CH_2)_4-NH_2
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
           10849 REFERENCES IN FILE CA (1907 TO DATE)
             430 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
           10871 REFERENCES IN FILE CAPLUS (1907 TO DATE)
               1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)
=> s norspermikine/cn
             0 NORSPERMIKINE/CN
=> s norspermidine/cn
L7
             1 NORSPERMIDINE/CN
=> d 17
     ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN
L7
RN
     56-18-8 REGISTRY
     1,3-Propanediamine, N-(3-aminopropyl)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
     Dipropylamine, 3,3'-diamino- (6CI, 8CI)
OTHER NAMES:
     1,5,9-Triazanonane
CN
CN
     1,7-Diamino-4-azaheptane
     1-Propanamine, 3,3'-iminobis-
CN
     3,3'-Diaminodipropylamine
CN
     3,3'-Iminobis (propylamine)
CN
CN
     3,3'-Iminodi (propylamine)
     4-Aza-1,7-diaminoheptane
CN
CN
     4-Azaheptamethylenediamine
     4-Azaheptane-1,7-diamine
CN
CN
     Bis (3-aminopropyl) amine
CN
     Caldine
     Di (3-aminopropyl) amine
CN
     Dipropylenetriamine
CN
     N-(3-Aminopropyl)-1,3-propanediamine
CN
     N-3-Aminopropyl-1,3-diaminopropane
CN
CN
     Norspermidine
     NSC 7773
CN
CN
     P 2 (hardener)
CN
     sym-Norspermidine
     3D CONCORD
FS
     C6 H17 N3
MF
CI
     COM
```

```
STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
LC
       BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS,
       CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DETHERM*, DRUGU, EMBASE,
       GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS, NAPRALERT,
       NIOSHTIC, PHAR, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA,
       USPAT2, USPATFULL
         (*File contains numerically searchable property data)
     Other Sources: DSL**, EINECS**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)
H_2N-(CH_2)_3-NH-(CH_2)_3-NH_2
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
            1346 REFERENCES IN FILE CA (1907 TO DATE)
             281 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
            1346 REFERENCES IN FILE CAPLUS (1907 TO DATE)
              48 REFERENCES IN FILE CAOLD (PRIOR TO 1967)
=> s spermine/cn
             1 SPERMINE/CN
L8
=> d 18
     ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN
r_8
     71-44-3 REGISTRY
     1,4-Butanediamine, N,N'-bis(3-aminopropyl)- (8CI, 9CI) (CA INDEX NAME)
CN
OTHER CA INDEX NAMES:
     Spermine (6CI)
CN
OTHER NAMES:
     1,5,10,14-Tetraazatetradecane
CN
     4,9-Diazadodecane-1,12-diamine
CN
     Gerontine
CN
CN
     Musculamine
CN
     N, N'-Bis (3-aminopropyl)-1, 4-butanediamine
CN
     N, N'-Bis (3-aminopropyl)-1, 4-tetramethylenediamine
CN
     Neuridine
CN
     NSC 268508
CN
     Spermin
FS
     3D CONCORD
     115-04-8
DR
     C10 H26 N4
MF
CI
     COM
                 ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*,
LC
     STN Files:
       BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS,
       CASREACT, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB,
       DDFU, DETHERM*, DRUGU, EMBASE, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB,
       IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PIRA, PROMT, RTECS*,
       SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL, VETU
         (*File contains numerically searchable property data)
     Other Sources: EINECS**, NDSL**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)
```

```
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
            8264 REFERENCES IN FILE CA (1907 TO DATE)
             248 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
            8272 REFERENCES IN FILE CAPLUS (1907 TO DATE)
             106 REFERENCES IN FILE CAOLD (PRIOR TO 1967)
=> s homospermidine/cn
             2 HOMOSPERMIDINE/CN
L9
=> d 19 1,2
     ANSWER 1 OF 2 REGISTRY COPYRIGHT 2003 ACS on STN
L9
     4427-76-3 REGISTRY
     1,4-Butanediamine, N-(4-aminobutyl)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
     Dibutylamine, 4,4'-diamino- (6CI, 7CI, 8CI)
OTHER NAMES:
CN
     4,4'-Iminobis[butylamine]
     Bis-(4-aminobutyl)amine
CN
CN
     Homospermidine
     N-(4-Aminobutyl)-1,4-butanediamine
CN
     N-(4-Aminobutyl)-1,4-diaminobutane
CN
CN
     sym-Homospermidine
FS
     3D CONCORD
     C8 H21 N3
MF
CI
     COM
                  AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA,
LC
     STN Files:
       CANCERLIT, CAOLD, CAPLUS, CASREACT, EMBASE, IFICDB, IFIPAT, IFIUDB,
       MEDLINE, NAPRALERT, TOXCENTER, USPATFULL
         (*File contains numerically searchable property data)
H_2N-(CH_2)_4-NH-(CH_2)_4-NH_2
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
             168 REFERENCES IN FILE CA (1907 TO DATE)
               3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
             169 REFERENCES IN FILE CAPLUS (1907 TO DATE)
               5 REFERENCES IN FILE CAOLD (PRIOR TO 1967)
     ANSWER 2 OF 2 REGISTRY COPYRIGHT 2003 ACS on STN
L9
     56-19-9 REGISTRY
     1,5-Pentanediamine, N-(3-aminopropyl)- (7CI, 8CI, 9CI) (CA INDEX NAME)
CN
OTHER NAMES:
     (3-Aminopropyl)-1,5-diaminopentane
CN
CN
     (3-Aminopropyl) cadaverine
     Homospermidine
CN
     N-(3-Aminopropyl)-1,5-diaminopentane
CN
     N-(3-Aminopropyl)-1,5-pentanediamine
CN
     N-(3-Aminopropyl)cadaverine
CN
     unsym-Homospermidine
CN
     3D CONCORD
FS
MF
     C8 H21 N3
CI
     COM
                  AGRICOLA, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA,
LC
     STN Files:
       CAOLD, CAPLUS, EMBASE, MEDLINE, TOXCENTER, USPATFULL
         (*File contains numerically searchable property data)
```

 $H_2N-(CH_2)_5-NH-(CH_2)_3-NH_2$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 99 REFERENCES IN FILE CA (1907 TO DATE)
- 2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 99 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- 4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)